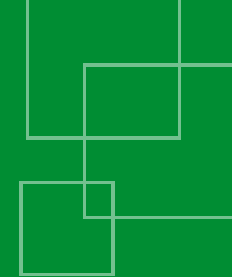


The Ekaru logo features a stylized white 'E' with a small square to its left, followed by the word 'karu' in a bold, white, sans-serif font.

Connecting People With Technology



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# Technology Workshop

## Costly Technology Mistakes and How to Avoid Them!

October 28, 2010  
Lunch & Learn Webinar

Microsoft®  
Small Business  
Specialist

**Microsoft®**  
**CERTIFIED**  
*Partner*

# Welcome!

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- Thank you for joining us today.
- In today's call we will cover a few **cost-saving technology tips**. The call will last approximately 30-45 minutes
- If you want to follow from your office, go to [www.ekaru.com](http://www.ekaru.com) / Go to "What's New" near the bottom of the page. Presentation will open in a browser, click the down arrow in nav bar to advance slides.

# Format

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- This is a “listen only” voice call.
  - (Reason, cut down on ambient noise, avoid “call on hold music” – a bit tough though, because I can’t hear you!)
- If you have questions, please eMail to [info@ekaru.com](mailto:info@ekaru.com) and we will try to include Q&A at the end of the call – we will be reviewing email live during the call.
- Call 978-692-4200 for help.



## Workshop Mission

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- Help you get more from the technology you already have.
- Introduce you to new technologies you need to know about.

# Outline

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- **Technology Tips** – *Prevent a major problem BEFORE it happens...*
  - ✓ Backup your data!
  - ✓ Security Patches up to date
  - ✓ Temporary File Clean Up
  - ✓ Regular re-boots
  - ✓ Antivirus, AntiSpyware, AntiSpam
  - ✓ Disk defragmentation
  - ✓ Don't buy what you don't need
  - ✓ What to do if your system is STILL slow

***Ask Questions: [info@ekaru.com](mailto:info@ekaru.com)***

# Don't Lose your DATA, back it up!

- You need to periodically back-up data to prevent loss in the event of:
  - Computer crash
  - Loss/Theft of systems, laptops
  - User mistakes
  - Professional services – Medical, Law, Accounting – Strict rules regarding proper records.
- Options:
  - Read-Write DVD/CD (Limited storage)
  - NAS (Network Access Storage)
  - On-Line
  - Technology Going Away: Tape Backup

# Losing your data is expensive!

- It takes 19 days and costs \$17,000 to retype 20 megabytes of sales data
- The same volume of accounting data takes 21 days and costs \$19,000
- Over 50% of all computers sold are notebooks
- A hard drive crashes every 15 seconds
- **2,000 laptops are stolen or lost every day**
- 32% of data loss is caused by human error
- 31% of PC users have lost all of their PC files to events beyond their control
- 25% of lost data is due to the failure of a portable drive
- 44% of data loss caused by mechanical failures
- 15% or more of laptops are stolen or suffer hard drive failures
- 1 in 5 computers suffer a fatal hard drive crash during their lifetime

- Various Sources,
- [DataDepositBox.com](http://DataDepositBox.com)

***Are you taking your backup off site?***



# Laptop Loss at Airports

In the first half of 2008, the Ponemon Institute surveyed 106 United States airports and over 800 business travelers to understand the frequency with which laptops are lost in airports. Some of the key results:

- Up to 12,000 laptops are lost in United States airports each week
- Between 65 and 70 percent of lost laptops are never reclaimed
- Most laptops are lost at security checkpoints
- 53 percent of business travelers surveyed carry sensitive corporate information on their laptop
- 65 percent of those who carry confidential information have not taken steps to protect it while traveling (**MA Law requires that personal information is encrypted on laptops!**)
- 42 percent of respondents say they do not back up their data



# Backup Options

- DVD, External Hard Drive - Cheap
- Carbonite
- MozyPro – Managed, “business class”
- Backlot – Archival
- Ekaru Backup and Disaster Recovery
  
- ... Many options, DO SOMETHING
  
- \$2000+ for clean room recovery of data!
- Complete data loss can kill a business

# Cost/Risk - Backup

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- Cost of ANY backup is much less than the cost of data loss, or down time.
- Make sure your backup is adequate – understand the basics of how it works.
- Consider a disaster-recovery level service if downtime is costly

# Regular pro-active care...

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- Security Patches up to date
  - *Required by Law* in MA for systems containing “Personal Information”
    - First Name, Last Name or First Initial, Last Name + SSN, Bank Account Number, etc.
  - Note some updates require re-boots
  - We recommend managed service
  - or Automatic Updates w/o Automatic Installation – Need to stay vigilant!

# Temporary File Clean up

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- Building up temporary files slows down your system.
  - Every time you visit a web page, temporary files are written to your hard drive
  - Eventually, your system slows down
  - Run Disk Cleanup -  
<http://support.microsoft.com/kb/310312>



# Regular Reboots...

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- Reboot servers – once per week
- Reboot PCs daily

# Keep Antivirus Up to Date

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- Keep your subscription current
- CHECK YOUR ANTIVIRUS

# PREVENTION – AntiVirus Protection!

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- Getting a virus can:
  - Destroy vital information
  - Shut down your business for days
  - Embarrass your business
  - Cost a lot of \$\$\$ in repair and lost productivity
  
- The good news: Viruses are easy to prevent!

# Anti-Virus Protection:

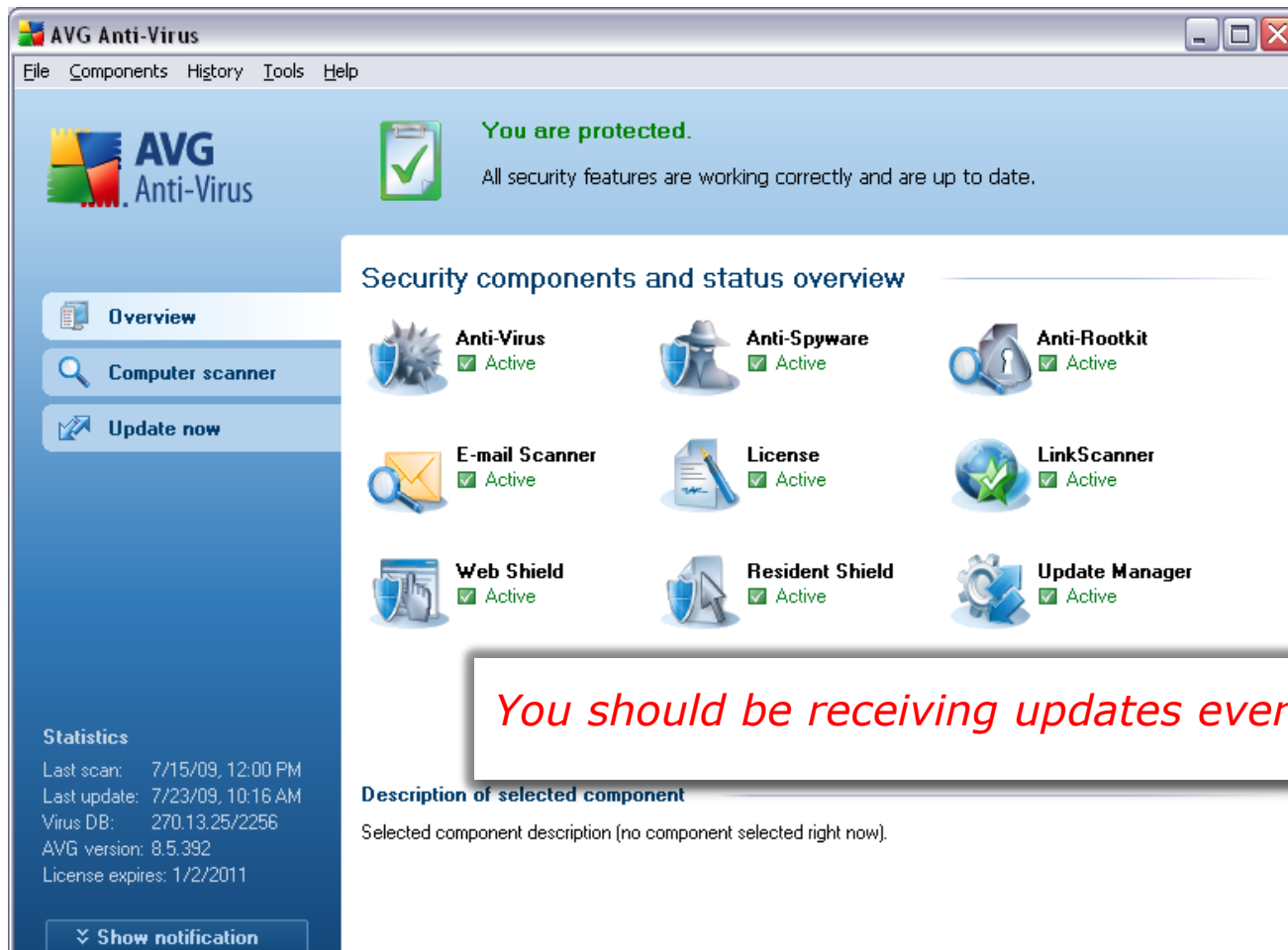
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## ■ Recommendations:

- Make sure your AntiVirus is up to date
- Make sure EVERY system on your network is up to date - Laptops that come and go are a BIG problem
- Scan all incoming mail
  
- *Don't use the FREE versions. They don't contain root-kit protection. (You're NOT saving!)*
- *Be aware that new versions of viruses are coming out frequently to evade update schedules!*



# AntiVirus Checking



*You should be receiving updates every few hours!*

# Antivirus Monitoring

System / Day	IP Address	01	02	03	04	05	06	07	08	09	10	11
SRV1	x	■	■	■	■	■	■	■	■	■	■	■
SRV2	x	■	■	■	■	■	■	■	■	■	■	■
SRV3	x	■	■	■	■	■	■	■	■	■	■	■

System / Day	IP Address	01	02	03	04	05	06	07	08	09	10	11
1	x	■	■	■	■	■	■	■	■	■	■	■
2	x	■			■	■	■	■	■			■
3	x	■	■	■	■	■	■	■	■	■	■	■
4	x	■	■	■	■	■	■	■	■	■	■	■
5	x	■	■	■	■	■	■	■	■	■	■	■
6	x	■			■	■	■	■	■			■
7	x	■	■	■	■	■	■	■	■	■	■	■

# AntiSpyware, AntiSpam

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- In addition to Antivirus software, you should also run AntiSpyware software (often bundled with Antivirus)
- AND Anti-SPAM software
  - Best way to filter spam is BEFORE it gets to your mail server.
  - A lot of SPAM contains viruses

# Defragment your Hard Drive

- Over time, data on your system becomes fragmented in pieces in different places on your drive
- Suggested – When your computer is slow.
- Makes your data access faster
- Debate – defragmentation stresses the drive, but running with a fragmented drive also stresses the drive.
- Windows 7 & Windows Vista will defragment in the background automatically.
- Otherwise, perhaps once/month

# Physically Clean your system

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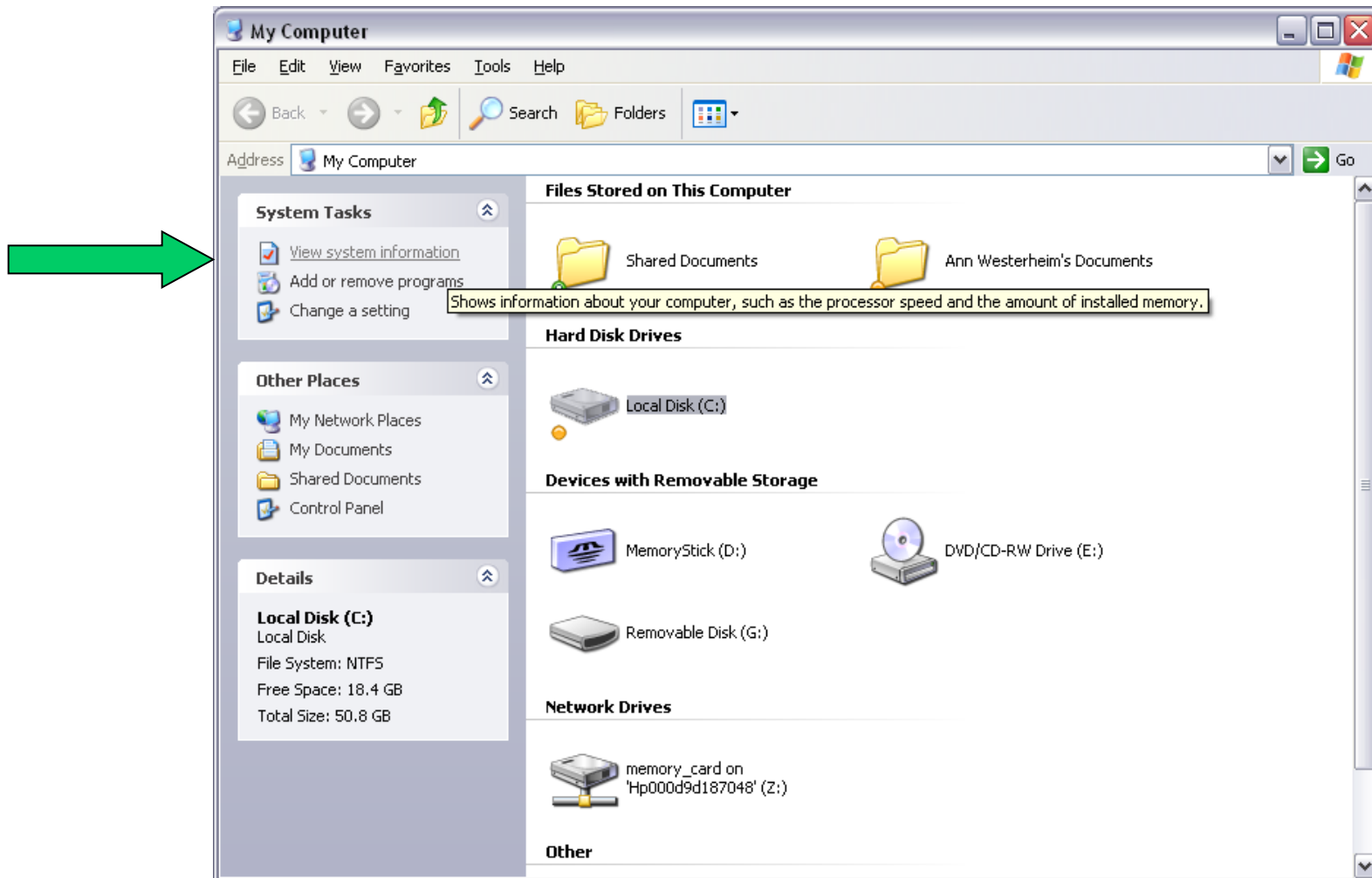
- Vacuum the outside of the fan area which can become clogged.
- Periodically clean the interior with care – use a specialized computer duster.
- Try to keep cables neat and off the floor (cleaners often bump cables)

# Your Computer is still slow!

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- Get more RAM!
  - Your computer will be faster
  - Extend Life of Hard Drive
  - Delay purchase of new system
  
- More RAM is better than a faster processor!

# How Much RAM do you have?




# How Much RAM do you have

- Start/MyComputer/System Properties
- Always get as much RAM as you can afford!

Manufactured and supported by:

**SONY**

Sony Electronics Inc.  
VAIO Computer  
Intel(R) Pentium(R) M  
processor 1.60GHz  
1.59 GHz, 1.49 GB of RAM

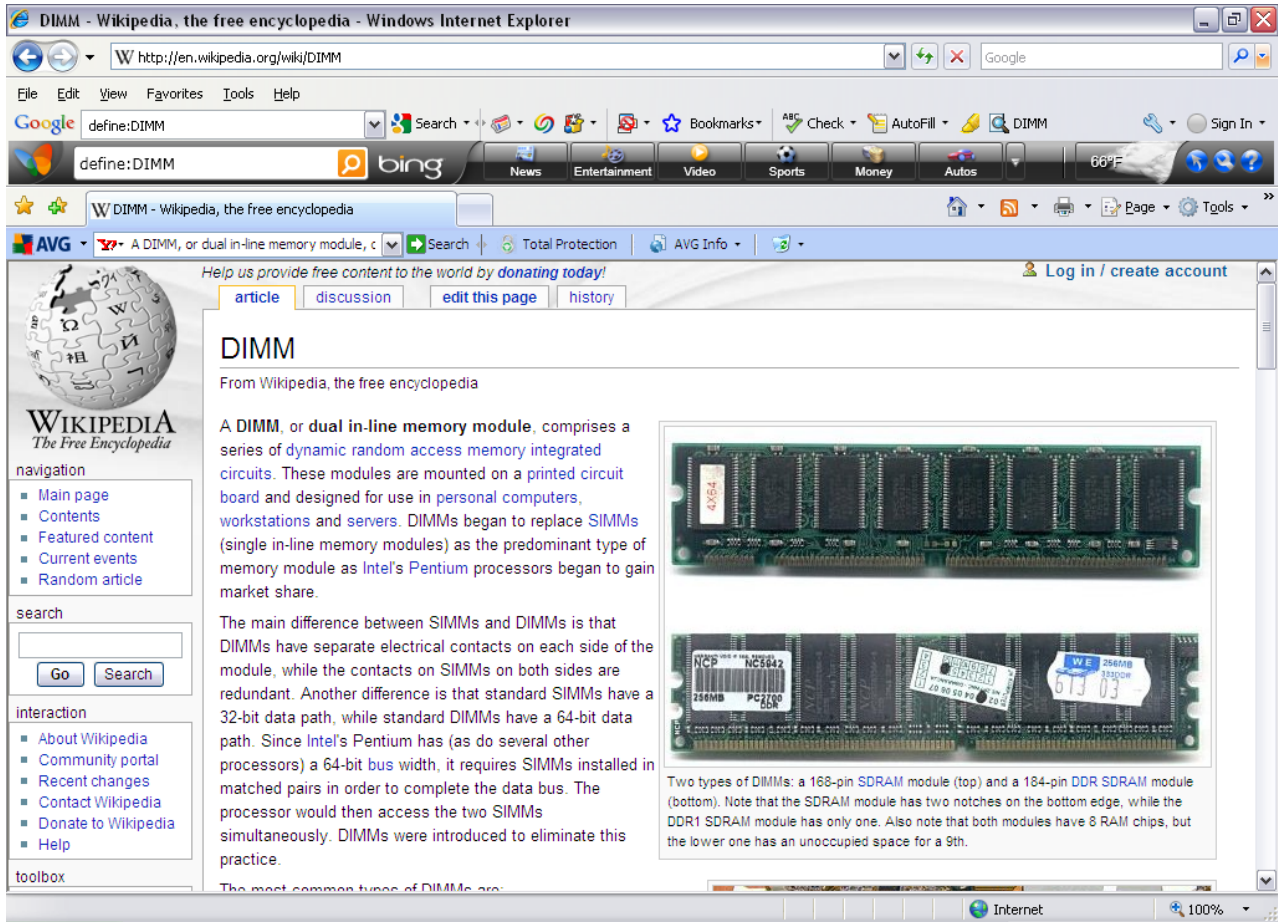
Processor:	Intel(R) Core(TM)2 Duo CPU T6570 @ 2.10GHz 2.10 GHz	
Installed memory (RAM):	3.00 GB (2.87 GB usable)	
System type:	32-bit Operating System	



# There are Many Types of RAM

- RAM = Random Access Memory
- The amount of RAM memory used in desktop and laptop computers is expressed in megabytes (MB) and gigabytes (GB). A gigabyte (1GB) is 1024MB
- DDR, DDR2, DDR3 (Double Data Rate – twice per clock cycle) – DDR2, DDR3 newer, faster.
- We recommend 3G-4G RAM

# Types of RAM



Number of Pins

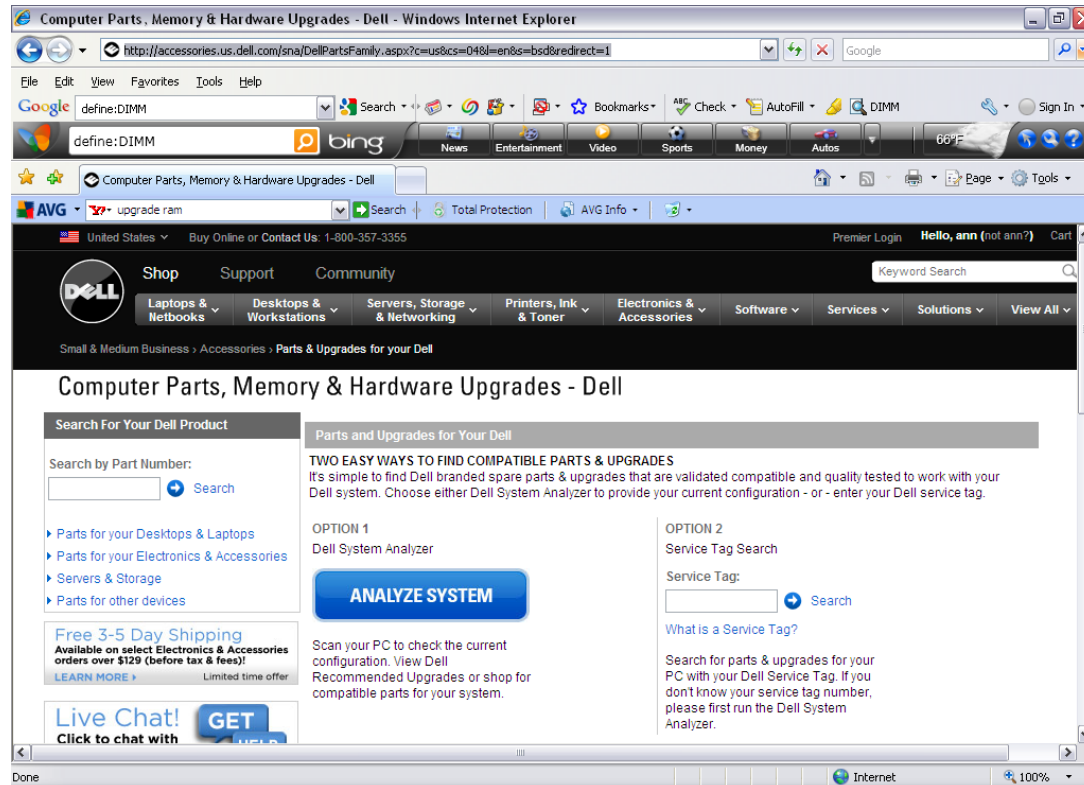
# RAM – How to Get it

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- Don't randomly buy off the shelf at Staples. You need the RIGHT memory to be compatible with your system.
- Good News! You don't need to know what all the terms mean.
- Use a parts configuration tool on the web (example DELL)

# Dell RAM Example:

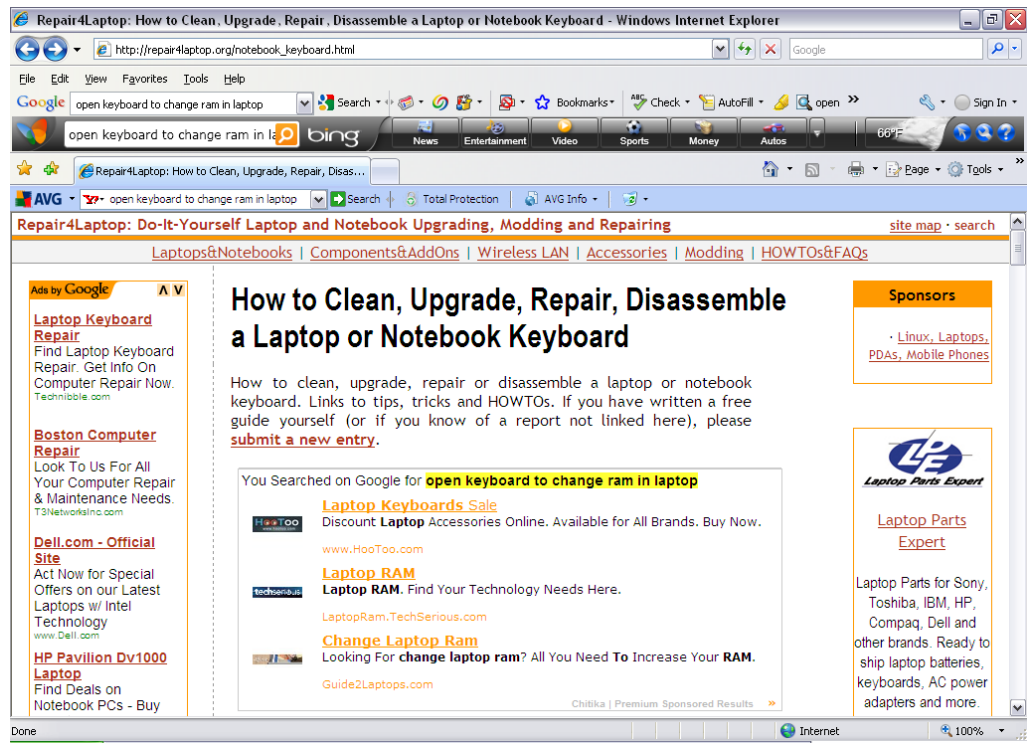
- <http://accessories.us.dell.com/sna/DellPartsFamily.aspx?c=us&cs=04&l=en&s=bsd&redirect=1>



# Installing RAM

- [http://repair4laptop.org/notebook\\_keyboard.html](http://repair4laptop.org/notebook_keyboard.html)

Googled "open keyboard to change ram in laptop"



# Install RAM on back of system

How to remove keyboard and replace memory in HP Compaq nc6400 laptop >> Inside my laptop - Windows Internet Explorer

http://www.insidemylaptop.com/remove-keyboard-replace-memory-hp-compaq-nc6400/

File Edit View Favorites Tools Help

Google open keyboard to change ram in laptop Search ABC Check AutoFill open Sign In

open keyboard to change ram in laptop bing News Entertainment Video Sports Money Autos 66°F

AVG open keyboard to change ram in laptop Search Total Protection AVG Info

First of all, turn off the laptop, unplug it from the power adapter and remove the battery. There are three screws securing the keyboard on the bottom. You can remove these screws with a #8 torx or flathead screwdriver. Remove all three screws.



www.insidemylaptop.com

- 7. Sony Laptops
- 8. Toshiba Laptops
- 9. Other Laptop Brands
- Backlight
- BIOS password
- Bluetooth
- CD/DVD drive
- CMOS battery
- Cooling fan
- Diagnostic utility
- Disassembly help
- Display hinges
- Ethernet port
- Fun projects
- Graphics card
- Hard drive
- Keyboard
- LCD screen

Done Internet 100%

# Install RAM under keyboard:

How to remove keyboard and replace memory in HP Compaq nc6400 laptop >> Inside my laptop - Windows Internet Explorer

http://www.insidemylaptop.com/remove-keyboard-replace-memory-hp-compaq-nc6400/

File Edit View Favorites Tools Help

Google open keyboard to change ram in laptop Search

open keyboard to change ram in la bing News Entertainment Video Sports Money Autos 66°F

How to remove keyboard and replace memory in HP C...

AVG open keyboard to change ram in laptop Search Total Protection AVG Info

There are four small latches located in the top row of keys on the keyboard. Unlock all four latches by moving them down with your fingernail.



Now you can lift up the keyboard as it shown in the picture below. Be careful, the keyboard is

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- [How to take apart Dell Vostro 1510 notebook](#)
- [How to remove LCD screen and inverter from Dell Inspiron 9400](#)
- [How to install new keyboard in Dell Inspiron 9400/E1705 laptop](#)
- [How to replace damaged LCD screen in Dell Vostro 1500 laptop](#)

USEFUL LINKS

- [All Laptop Parts Explained](#)
- [Any Notebook Part](#)

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# Servers: Faster Hard Drive

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- 5400 RPM
  - 10,000 RPM
  - Higher speeds..
- 
- If your server is slow, and a new server won't be in the budget for a while, this is a great solution!



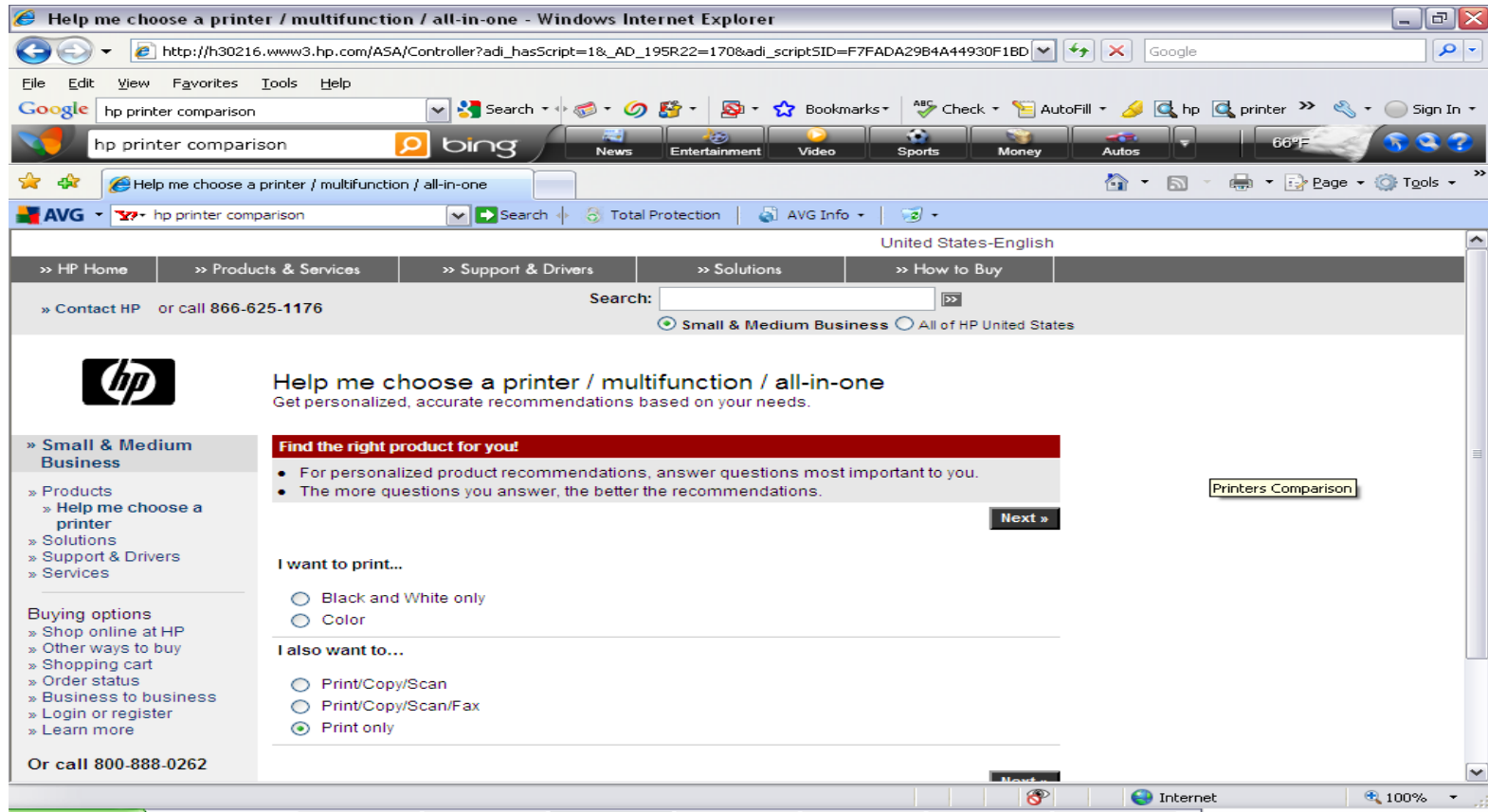
- 
- Please send an email to [info@ekaru.com](mailto:info@ekaru.com) if you have a question and we'll try to get it answered. We will monitor email live.

# Research what you NEED

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- Spend some time thinking about features – what do you NEED
- Example – Printers – how many pages per minute, network ready? Color? Cost of Ownership?
- Don't waste money on technology that won't be used!

# HP Printer Selection - Example



# Many Examples on Line

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- Configuration tools, product comparisons...
- Servers – RAID, Drive Speed, etc...
- Download trial versions of software to see if it's the right fit before buying.

# Be Green if you retire your system

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- If its time to retire your system (3+ years old...)
- Remember to dispose of old equipment properly:  
<http://www.epa.gov/region1/solidwaste/electronic/reuse.html>
- Danger – Harzardous Waste!
- Local electronic recycling dates
- Donations

# eWaste – A Growing Problem



# Summary

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- Backup your data
- Keep your system up to date: Security Patches, Antivirus, AntiSpyware, Anti-Spam.
- Slow Server – Get more RAM AND faster Hard Drives
- Research what you NEED!
- Be green when you “retire” old electronics equipment!

Thank You!:

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For more information:

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*Connecting People with Technology*  
978-692-4200  
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